

67097-360; EH-10974

IN THE CLAIMS

1.-24. (Cancelled)

25. (Previously Presented) A method for manufacturing a core for casting a metal part comprising the steps of:

providing ceramic slurry;

injecting the slurry into a core die to form a green core with solid portions spaced apart by a corresponding hollow portion; and

forming at least one support element between adjacent solid core portions, the at least one support element having a shape optimized to prevent the core from fracturing during a casting process and to minimize operating mechanical stress in the area of the metal part formed by the support element, said shape of said at least one support element including a cross-sectional shape having a thickness at a central location that is greater than a thickness at either side of said cross-sectional shape.

26. (Original) The method of claim 25, further comprising the steps of:  
removing the core from the die;

drying the core; and

heating the core at a predetermined temperature to increase material strength.

27. (Original) The method of claim 25 further comprising the steps of:  
treating the surface of the core to increase strength of the core; and  
machining the core to meet specification dimensions.

28. (Currently Amended) The method of claim 25, wherein a cross section of the at least one support element formed comprising the steps of:

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defining a first radius;

defining a second radius a first distance from the first radius;

defining a third radius a second distance from the second radius;

defining a fourth radius having a circumference positioned tangent to the circumference of the first, second, and third radii; and

defining a fifth radius having the circumference positioned tangent to the circumference of the first, second, and third radii, and with said first, second, third, fourth and fifth radii being utilized to form said shape of said at least one support element, with said second radii at least partially forming said central location, and said first and third radii being utilized to form said sides of said cross-sectional shape.

29. (Previously Presented) The method of claim 28, wherein the first and third radii are substantially equal in length.
30. (Currently Amended) The method of claim 28, wherein the fourth ~~fourth~~ and fifth radii are substantially equal in length.
31. (Original) The method of claim 28, wherein the first and second distances are substantially equal in length.
32. (Currently Amended) The method of claim 28, wherein the fourth ~~fourth~~ and fifth radii are positioned on opposite sides of the support cross-section.
- 33.-59. (Cancelled)
60. (Previously Presented) The method of claim 25, wherein said at least one support element is formed to be integral with said adjacent solid core portions.

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61. (Previously Presented) The method of claim 28, wherein said thickness at said central location is defined by said second radius, and said thicknesses at said sides are defined by said first and third radii.